EXHIBIT 17

Page 1

1   UNITED STATES DISTRICT COURT

2   EASTERN DISTRICT OF TEXAS

3   SHERMAN DIVISION

4   ----------------------------------x

5   THE STATE OF TEXAS, et al.,

6   Plaintiffs,   Case No.

7   vs.   4:20-cv-00957-SDJ

8   GOOGLE, LLC,

9   Defendant.

10   ----------------------------------x

11

12   ** HIGHLY CONFIDENTIAL **

13   VIDEOTAPED DEPOSITION OF CYNTHIA RUDIN

14   (Taken by Defendant)

15   Durham, North Carolina

16   Wednesday, October 9, 2024

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21   Reported by Andrea L. Kingsley, RPR

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1   MR. COLLIER: Objection. Form.

2   A.   I believe the answer is no, but I would

3   need to double-check it.

4   Q.   Those multipliers were designed to

5   sometimes increase bids to exceed the predicted bid

6   of other AdX buyers; correct?

7   A.   Correct.

8   Q.   And those multipliers were designed to

9   sometimes decrease bids to only slightly exceed the

10   predicted bid of other AdX buyers; correct?

11   A.   I'm sorry, could you repeat that again?

12   Q.   Yes.

13   And those Bernanke multipliers were

14   designed to sometimes decrease bids to only slightly

15   exceed the predicted bid of other AdX buyers;

16   correct?

17   A.   That can definitely happen, yes.

18   Q.   Under Project Bernanke --

19   A.   Sorry, you said "other AdX bidders";

20   right? Can you repeat that again?

21   Q.   I did. Other AdX bidders.

22   A.   Okay, thank you.

23   Go ahead.

24   Q.   Under Project Bernanke Google expanded

25   the number of auction wins in AdX by allowing Google

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1   Ads buyers to purchase otherwise unsold impressions;

2   correct?

3   MR. COLLIER: Objection.

4   A.   It did that, but a lot more, yes.

5   Q.   Turning to paragraph 149 of your report,

6   you see that language that I was just reading in the

7   first sentence of paragraph 149. "Google launched

8   Project Bernanke to expand the number of auction

9   wins in AdX by allowing Google Ads buyers to

10   purchase otherwise unsold impressions."

11   Do you see that language?

12   MR. COLLIER: Objection. Form.

13   A.   Yeah, I believe that's the language you

14   just read.

15   Q.   Correct. I just want to make sure we're

16   all following along at the same paragraph.

17   So Bernanke allowed Google Ads buyers to

18   purchase additional impressions; correct?

19   A.   It did that as well as other things,

20   yes.

21   Q.   Some of those impressions would have

22   otherwise gone unsold?

23   A.   Some of those impressions would have

24   gone unsold in AdX. They may have gone to another

25   auction where they may have been sold later. They

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1   MR. HUNSBERGER: This is actually a

2   good breaking point that we can take break.

3   THE VIDEOGRAPHER: Going off the

4   record. The time is 4:21 p.m.

5   (Recess taken.)

6   THE VIDEOGRAPHER: Going back on

7   the record. The time is 4:52 p.m.

8   BY MR. HUNSBERGER:

9   Q.   Professor Rudin, I would like to turn

10   our attention to another optimization that you

11   discuss in your report, dynamic revenue share, which

12   you and others abbreviate as "DRS."

13   And if I refer to dynamic revenue share

14   as "DRS," will you understand I mean to refer to the

15   sell-side DRS program?

16   A.   Yes.

17   Q.   At a high level could you summarize for

18   me your understanding of how DRS functions?

19   A.   So DRS is a program where Google adjusts

20   its take rate for different auctions.

21   Q.   If we take a look at your report at

22   paragraph 173, you say that "Google launched

23   sell-side DRS to increase auction wins in AdX when

24   bids from AdX winners would be below the floor

25   price."

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1   And the -- let's go with your

2   hypothetical. So in this case the publisher

3   doesn't -- it's like a random throttle. Right?

4   It's a uniformly random throttle. Right?

5   Throttling with some probability. Right?

6   So if the throttling is lower, then the

7   publisher might not change their strategy.

8   THE WITNESS: Can we take a break

9   in few minutes?

10   MR. HUNSBERGER: If you would like

11   to take a break, we can take a break.

12   THE VIDEOGRAPHER: Going off the

13   record. The time is 5:16 p.m.

14   (Recess taken.)

15   THE VIDEOGRAPHER: Going back on

16   the record. The time is 5:29 p.m.

17   BY MR. HUNSBERGER:

18   Q.   Professor Rudin, I would like to take a

19   step back and talk a little bit about auctions

20   generally.

21   Is it your understanding that in a

22   second-price auction the highest bidder pays the

23   greater of the reserve price and the second highest

24   bid?

25   A.   Yes.

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1   Q.   And is it your understanding that

2   despite paying the amount of the second highest bid,

3   the highest bidder still wins the auction; correct?

4   A.   Yes.

5   Q.   I would like to go through a

6   hypothetical in a world without DRS and a world with

7   DRS.

8   So in Scenario 1 let's imagine a

9   scenario where the publisher's reserved price is

10    $10, the highest bid in AdX is $11, the second

11   highest bid is $10.50, and the AdX revenue share is

12   fixed at 20 percent.

13   A.   You seem to think I can do math in my

14   head. Whoa.

15   MR. COLLIER: I don't think he'll

16   object if you have paper and pen.

17   Q.   That's fine. Go ahead. You can write

18   it down if that helps.

19   A.   We're five hours in. I don't know.

20   Q.   Do you want me to repeat the

21   assumptions?

22   A.   You can give me a pencil and paper, but,

23   I mean, I don't know if I'm going to be able to

24   follow all your calculations. I don't know where

25   you're going with them. I'm just warning you.

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ATTORNEY ERRATA SHEET FOR THE TRANSCRIPT OF:

Case Name: *United States et al. v. Google LLC*, 4:20-cv-00957-SDJ (E.D. Tex.)

Deposition Date: October 9, 2024

Deponent: Cynthia Rudin (Plaintiff's Machine Learning Expert in EDTX)

CORRECTIONS

Page	Line	Change	Reason
6	11	Change "have my colleagues Russell Steinthal, Sandya" to "have my colleagues Russell Steinthal, Sandhya"	Transcription Error
10	14-15	Change "MR. HUNSBERGER: I understand, Counselor." to MR. HUNSBERGER: I understand, Counsel"	Transcription Error
31	2-3	Change "MR. HUNSBERGER: I'm not asking her to –" to MR. HUNSBERGER: I'm not asking her to waive–"	Transcription Error
41	10-11	Change "MR. HUNSBERGER: Counsel, I said without disclosing –" to "MR. HUNSBERGER: Counsel, just to be clear, I said very clearly without disclosing –"	Transcription Error
61	15	Change "tools or using it in the abstract sense" to "tools or instead using it in the abstract sense."	Transcription Error
71	14	Change "Ads, that's an internal option and you'd have to go" to "Ads, that's an internal auction and you'd have to go"	Transcription Error
95	15	Change "abstracted options to illustrate how various Google" to "abstracted auctions to illustrate how various Google"	Transcription Error
99	7	Change "machine-learning models?" to "developed machine-learning models?"	Transcription Error
104	11	Change "would be useful in ad tech options" to "would be useful in ad tech auctions"	Transcription Error
130	11	Change "You're referring here about user intent" to "You're referring here, what you're describing, about user intent"	Transcription Error
167	1-4	Change "Q. If we turn to paragraph 148 in the "Bernanke" section, you state in this paragraph that publishers and advertisers would not create a model to optimize their strategies with respect to" to "Q. If we turn to paragraph 148 in the "Bernanke" section, you state in this paragraph that "publishers and advertisers could not create a model to optimize their strategies" with respect to"	Transcription Error

171	15-17	Change "Q. You indicate in paragraph 183 that publishers and advertisers could not create a model to optimally respond to RPO; correct?" to "Q. You indicate in paragraph 183 that "publishers and advertisers could not create a model to optimally respond to RPO"; correct?"	Transcription Error
181	18	"More specifically, Google used AdX option data from" to "More specifically, Google used AdX auction data from"	Transcription Error
182	5	"on a per-buyer basis using historical AdX option" to "on a per-buyer basis using historical AdX auction"	Transcription Error
188	24	Change "bids from AdX winners would be below the floor" to "bids from AdX bidders would be below the floor"	Transcription Error
197	14	Change "publisher sites?" to "publisher's sites?"	Transcription Error
197	23	Change "being shown on publisher sites?" to "being shown on publisher's sites?"	Transcription Error
198	3	Change "Did you investigate whether Google Ad" to "Did you investigate whether Google's Ad"	Transcription Error
204	9	Change "scenario where the publisher's reserved price is " to "scenario where the publisher's reserve price is"	Transcription Error
209	1	Change "The percent of those auctions was 39 percent. (Of" to "The percent of those auctions was 39 percent. Of"	Transcription Error
211	11	Change "competing candidate" to "competing_candidate"	Transcription Error
211	18-19	Change "to another document, and this is a document you said in your report" to "to another document, and this is a document you cite in your report."	Transcription Error
212	8	Change "competing candidate includes cases where DRS changed the winner of the auction" to "competing_candidate includes cases where DRS changed the winner of the auction."	Transcription Error
215	10	Change "are the two highest bids in AdX and both bids" to "are the two highest bids within AdX and both bids"	Transcription Error
225	6	Change "report, right about paragraph 67, do you see the" to "report, right above paragraph 67, do you see the"	Transcription Error
233	19	Change "In all other ways." to "In all other ways, except the three ways that I described."	Transcription Error
241	5	Change "Google's optimization may have affected rival" to "Google's optimizations may have affected rival"	Transcription Error

Date: <u>November 8, 2024</u>   Signature: <u>/s/ James K. Hunsberger</u>